

# UNITED STATES PATENT AND TRADEMARK OFFICE

Mh

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/082,273	02/26/2002	David P. Buehler	DP-304871	6418	
7590 01/22/2004		EXAMINER			
JIMMY L. FUNKE DELPHI TECHNOLOGIES, INC.			DATSKOVSKIY, MICHAEL V		
Legal Staff Mail Code: CT10C			ART UNIT	PAPER NUMBER	
P.O. Box 9005 Kokomo, IN 46904-9005			2835 DATE MAILED: 01/22/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)					
Office Action Summary		10/082,273	BUEHLER ET AL.					
		Examiner	Art Unit	1 \				
		Michael V Datskovskiy	2835	MW				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SH THE - Exte after - If the - If NC - Failu - Any	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. In period for reply specified above is less than thirty (30) days, a reply operiod for reply is specified above, the maximum statutory period we are to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	nely filed s will be considered timely the mailing date of this co O (35 U.S.C. § 133).					
1)⊠	Responsive to communication(s) filed on 02 Ja	nuary 2004.						
2a) <u></u> □	This action is <b>FINAL</b> . 2b)⊠ This	action is non-final.						
3) 🗌	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims								
4)	Claim(s) 1-7 and 20 is/are pending in the applie	cation.						
	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)	Claim(s) is/are allowed.							
·	Claim(s) 1,4 and 5 is/are rejected.							
	Claim(s) 2,3,7 and 20 is/are objected to.							
8) Claim(s) are subject to restriction and/or election requirement.								
Application Papers								
9) The specification is objected to by the Examiner.								
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority under 35 U.S.C. §§ 119 and 120								
	12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:							
1. Certified copies of the priority documents have been received.								
<ul> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage</li> </ul>								
application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.								
13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.								
a) The translation of the foreign language provisional application has been received.								
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.								
Attachmen	t(s)							
1) Notic	e of References Cited (PTO-892)	4) Interview Summary						
· —	ee of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s) _	5) Notice of Informal P Other:	atent Application (PTC	)-152)				

OFF.: A.M.:.. O..........

B FIEDL IN 6

U.S. Patent and Trademark Office

Application/Control Number: 10/082,273 Page 2

Art Unit: 2835

#### **DETAILED ACTION**

### **Drawings**

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the wire bonding (claim 1 and the jell material (claim 6) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### Claim Objections

2. Claim 1 is objected to because of the following informalities: The amended claim comprises the term: "interconnect locations" in lines 5 and 11. Although it is appropriate to use it in line 5, it is not appropriate to use it in line 11, because one cannot couple pins to a "location". Appropriate correction is required. Examiner suggests to change "locations" to "means".

#### Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to

Art Unit: 2835

which it pertains, or with which it is most nearly connected, to make and/or use the invention. The cover claimed in claim 1 as: "being made of a material having capability of withstanding high temperatures", which is not supported by the specification, wherein said cover is described as comprising along with a high temperature plastic also a cast aluminum used for providing heat sink properties. (Such a combination of materials is also not clear). The bottom is claimed as "being made from a material having heat sink capabilities", which is also not supported by the specification, wherein said bottom is described as made of a high temperature plastic material, which is used for heat sinks.

## Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1 and 4-5, as best understood by examiner, are rejected under 35 U.S.C. 103(a) as being unpatentable over Buselmeier et al.

Buselmeier et al teach a heat sink assembly, Fig.4, with integrated electronics, comprising: a cover W having one side open for exposing an interior cavity; said cover being made from a high temperature heat dissipating alloy (col.5, lines 6-8); a circuit SI/E housed in said cavity and having interconnect means at said open side of said cover; a bottom G for attachment to and sealing said open side of the housing, said bottom being made from a heat dissipating material (col.5, lines 9-24), and having a plurality of pins KP molded therein, said pins being coupled to said interconnect means

Art Unit: 2835

by a wire bond (see Fig.4) and are solderable at another end to an external device. Buselmeier et al do not teach said circuit being a hybrid type of a circuit. It would have been an obvious matter of design choice to use a heat assembly by Buselmeier et al with a hybrid type of a circuit, since applicant has not disclosed that a type of a circuit solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with any kind of heat generating electronic components.

### Allowable Subject Matter

- 7. Claim 1 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.
- 8. Claims 2-3, 7 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 9. The following is a statement of reasons for the indication of allowable subject matter: Said cover comprising a track molded in an edge of said open side for an interconnection with a bead molded on a bottom (claims 2-3); said cover and bottom are filled with a jell material (claim 6); said cover has partitions 9calim 7) and said hybrid circuit is oriented substantially perpendicular to a plane defined by a face of the bottom (claim 20).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael V Datskovskiy whose telephone number is 306-4535. The examiner can normally be reached on 8-4:30.

Page 5

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (703) 308-4815. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (7030 306-3431.

lucion Cattler

**Primary Patent Examiner** 

Michael Datskovsky

January 14, 2004.